

Col. Mark A. Werth
MCAS Yuma Commanding Officer

Welcome to our 47th annual air show, open house and celebration of the 50th anniversary of the air station. Every year we open our gates to provide the community the opportunity to see military equipment and personnel in action.

This year you will have the opportunity to observe the life saving techniques of our own Search and Rescue helicopter crew, be awed by the brilliant display of power and agility of the Marine Corps AV-8B Harrier, Navy F/A-18 Hornet, Air Force F-16 Falcon, along with vari-



ous civilian performers. Above all, you will have the opportunity to interact with all the men and women who proudly wear the uniform of the United States Armed Forces.

Make no mistake, our nation is at war and the Marines and Sailors of MCAS Yuma have answered the call. In fact, every deployable unit here has deployed either to Afghanistan or Iraq at least three or four times.

MCAS Yuma's mission is to provide aviation training ranges that are critical to our nation's Global War on Terrorism. However, our mission which is critical to our national defense would be difficult to accomplish without the tremendous support we receive from the Yuma community.

We continually seek creative training opportunities to prepare our Marines and Sailors for combat and Yuma has supported us by allowing the use of the local community to enhance training to provide realism.

On behalf of all the Marines, Sailors, Civilians and family members of MCAS Yuma, I thank you for your support. Enjoy the show.



Department of the Navy's busiest air station dedicated to training

In its 50th year of Marine Corps residency, Marine Corps Air Station Yuma remains the busiest air station in the Marine Corps supporting more than a quarter of a million flight operations annually, the station has rightfully earned its title.

From its beginnings in 1929 as a stop over point for 25 planes in a race from New York to Los Angeles, the station has grown to house more than 5,000 Marines and sailors, many of them with families. To provide the best aviation training possible, the station also relies on a work force of nearly 1,300 civilian employees.

Added to the mix, the station has been one of the premier training locations in the Naval service for more than 40 years. This is because the station's location and live fire ranges are able to offer aviation and air-ground integration training that is unavailable elsewhere. With the training, the air station hosts about 100 units, bringing an average of 600 aircraft and 14,000 personnel annually.

Perhaps the station's largest contribution is that it is the only joint-use air station in the Marine Corps. This means MCAS Yuma provides all air traffic control, airfield security and runway and taxiway maintenance for both the station and the Yuma International Airport at no cost to the community. The station's search and rescue unit also helps the community



by responding to accidents in the nearby sand dunes, remote areas of the desert and on the highways, saving around 40 civilians annually, according to the unit historian.

Virtually every aviation unit in the Marine Corps has trained in Yuma before deploying to Iraq or Afghanistan. Yuma makes a great site for training because it provides 2.8 million acres of aerial training, live bombing and gunnery ranges. These ranges give today's pilots some of the most advanced and realistic situations available. Many units come here to attend the Weapons and Tactics Instructor Course hosted by Marine Aviation Weapons and Tactics Squadron 1.

The course offers pilots in the Marine Corps and other services the opportunity to improve their skills and take what they've learned back to their own. Recognized globally, WTI is considered one of the highest-level aviation courses offered.

MAWTS-1 offers another exercise that prepares units for deployment to a desert environment, Desert Talon. The exercise allows integration of both rotary and fixed-wing aircraft units with ground units in desert and urban terrain. All of this is done with

the cooperation of the local community, which allows the Marines to use public facilities such as the local schools and parks for training.

Col. Mark A. Werth
Commanding Officer

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The editorial content of this guide was prepared by Marine Corps Air Station Yuma's public affairs office staff and outside sources. The guide is a supplement to the Desert Warrior. The views and comments expressed in the opinion articles of the Desert Warrior are the author's individual opinions and do not necessarily reflect the views of the

Department of Defense, the United States Marine Corps or Marine Corps Air Station Yuma. If you have an opinion that you would like to see published, submit your article or letter to william.lisbon@usmc.mil or bring it to the public affairs office in building 852.

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Schedule of Events

TIME	ACT	AIRCRAFT
8:00 a.m.	Gates open	None
9:20 a.m.	Kofa High School King's Regiment Band	None
9:40 a.m.	Yuma High School Marching Band	None
9:55 a.m.	Military Freefall School Parachute Demo	CN-235 CASA
10:00 a.m.	National Anthem	None
10:15 a.m.	Rob Harrison	Zlin 50LX
10:30 a.m.	Search and Rescue Demo	UH-1N
10:41 a.m.	Melissa Andrzejewski	Edge 540
11:00 a.m.	Marine Corps F-5 Flyby	F-5 Tiger
11:10 a.m.	Navy F/A-18 Flyby	F/A-18 Hornet
11:25 a.m.	Alabama Boys	Piper J-3
11:45 a.m.	Marine Corps AV-8B Demo	AV-8B Harrier
12:00 p.m.	Intermission	None
12:25 p.m.	Kofa High School King's Regiment Band	None
12:40 p.m.	Yuma High School Marching Band	None
12:55 p.m.	Military Freefall School Parachute Demo	CN-235 CASA
1:20 p.m.	Jon Melby	Pitts S-1-11B
1:35 p.m.	Air-to-Air Refueling Demo	KC-130 & AV-8B Harriers
1:55 p.m.	Air Force B-1 Flyby	B-1 Lancer
2:10 p.m.	Air Force Heritage Demo	P-51 Mustang & F-16
2:55 p.m.	Tora, Tora, Tora	AT-6s & BT-13s
3:14 p.m.	Wall of Fire	AT-6s & BT-13s

Flight line Rules

- No recreational vehicles will be allowed on the air station.
- No weapons of any kind allowed on the air station.
- No smoking allowed on the flight line.
- No one is allowed in marked-off areas without permission.
- Coolers are only permitted for medical reasons or bottle-fed children.
- No food or beverages will be allowed on the flight line.
- No pets will be permitted; only service animals allowed on the flight line.
- No backpacks or duffle bags allowed on the flight line.
- All vehicles and persons are subject to search.



Record-breaking Wall of Fire to heat up air show

Cpl. Laura A. Mapes
Desert Warrior Staff

In celebration of the air station 50th anniversary, this year's air show will finish with a bang.

Spectators will be treated to an attempt to break the world record for the longest wall of fire on the station's flight line as well as a re-enactment of the attack on Pearl Harbor.

"Tora, Tora, Tora," a live re-enactment of the Dec. 7, 1941, attack on Pearl Harbor, is put on by the Commemorative Air Force.

The demonstration will involve a lot of pyrotechnics, including a bomb squad who

will coordinate the blast.

As part of the air show, "Tora, Tora, Tora," is scheduled to break the current world record for the longest wall of fire, said Roger Lopez, Marine Corps Community Services marketing director.

The 10,000-foot wall will be made up of commercial-grade explosives, including dynamite, electric blasting caps and 20,000 feet of detonation cord, said Gordon Webb, lead pyrotechnic specialist for the Tora Bomb Squad.

"This, by far, will be the largest explosion I've set up," said Webb.

The current record, set in 2007 in Indiana, was roughly 6,636 feet long.

"Initially, we were going to



break the current record with an 8,000-foot-long wall of fire," said Lopez. "However, our sponsors felt that since it is the 50th anniversary of the base, we may as well do it big."

The air station has more than 13,000 feet of flight line. This is one of the longest flight lines in the world, acting as an alternate landing site for the space shuttle.

There is plenty of space to work with, said Lopez.

The 10,000-foot-long and 150-foot-high display will take several hours to set up. Marines have been working for about a week to clear brush and debris out of the space between the air strips, where the fire wall will be ignited.

Guinness World Records guidelines for the longest wall of fire state that the fire wall must be continuous without gaps for at least five seconds, with flames reaching at

least 40 meters high. The event will be documented by video and photographs, measured by a professional surveyor and have two witness statements.

"This record won't be broken for a while," said Webb.

The "Tora, Tora, Tora," along with the fire wall, will be the grand finale of this year's record-breaking air show.

"People just don't have any idea," said Lopez. "This thing is going to be huge!"

Directions to MCAS Yuma

Approaching from central Yuma or Interstate 8:

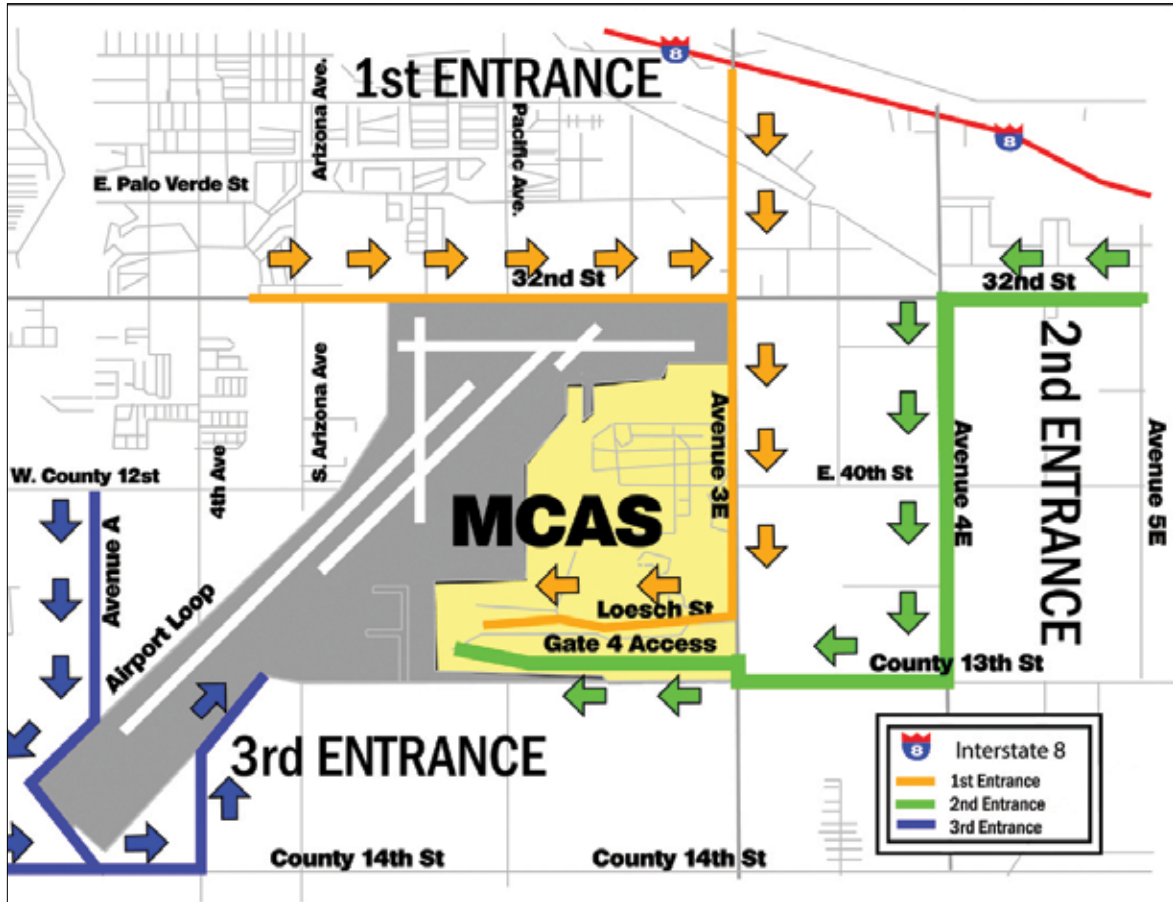
Take Avenue 3E south to the air station. Proceed past the main gate and enter through the Loesch Gate.

Approaching from eastern Yuma or the Foothills region:

Take Avenue 4E south to County 13th Street. Go west on County 13th Street to Avenue 3E and enter through Gate 4. No left turns will be allowed onto Avenue 3E from westbound traffic on 32nd Street.

Approaching from areas west of Avenue A, Somerton and San Luis:

Take Avenue A to County 14th Street. Go east on County 14th Street to the 4th Avenue extension and go north to enter the air station.



MARINE AIRCRAFT



AV-8B HARRIER

The AV-8B Harrier vertical take-off and landing aircraft is an amazing piece of aviation technology designed to attack and destroy surface targets under day and night visual conditions. The Harrier can be armed with 500- and 1000-pound bombs, as well as laser-guided bombs. Harriers are often equipped with LITENING II targeting pods to deliver laser-guided munitions with pinpoint accuracy.



MV-22 OSPREY

The MV-22 Osprey is a multi-mission, tiltrotor aircraft with both vertical takeoff and landing as well as short takeoff and landing capabilities. It is designed to perform missions like a conventional helicopter with the long-range, high-speed cruise performance of a turboprop aircraft.



AH-1 SUPER COBRA

The Super Cobra is a day and night attack helicopter capable of providing fire support and security for a Marine Air-Ground Task Force. Cobras are capable of engaging rotary- and fixed-wing aircraft and ground targets. The AH-1 also provides fire support and coordination to landing forces during amphibious assaults.



KC-130 HERCULES

The KC-130 is a multi-role, multi-mission tactical tanker transport which provides the support required by Marine Air-Ground Task Forces. This versatile asset provides in-flight refueling to both tactical aircraft and helicopters as well as rapid ground refueling when required. Additional tasks performed are aerial delivery of troops and cargo, emergency resupply, emergency medivac, tactical insertion of combat troops and equipment and evacuation missions.



F-5 TIGER

The F-5 Tigers of Marine Fighter Training Squadron 401 provide realistic training for Marine and Navy pilots as aggressor aircraft. The F-5's appearance and flight characteristics enable VMFT-401 to simulate various enemy aircraft types. VMFT-401, the only aggressor squadron in the Marine Corps, takes part in Marine training exercises both at Yuma and throughout the United States.



F/A-18 HORNET

The F/A-18 Hornet is a multi-mission, high-performance jet designed for fighter and attack missions. The Hornet's unique combination of power and light weight gives this aircraft impressive maneuverability, climb and acceleration. The agility of the Hornet is crucial in combat, as it engages both land and airborne targets. When battle-ready, the Hornet can carry up to 17,000 pounds of armaments.



CH-46 SEA KNIGHT

The CH-46 is used by the Marine Corps to provide all weather, day or night assault transport of combat troops, supplies and equipment. Troop assault is the primary function of the Sea Knight and movement of supplies and equipment is secondary. Additional tasks may be assigned, such as combat support, search and rescue, support for forward refueling and rearming points, aeromedical evacuation of casualties from the field and recovery of aircraft and personnel.



CH-53 SEA STALLION

The CH-53 Sea Stallion is a heavy-lift transport helicopter. Originally developed for use by the United States Marine Corps, it is also in service with Germany, Mexico, Iran, Israel, and with the U.S. Air Force.



UH-1 HUEY

Known as the Huey, the UH-1 is primarily used by the Marine Corps to provide airborne command, control and coordination for assault support operations. Additionally, it is used for assault transport and maritime special operations, forward air control, aeromedical evacuation of casualties from the field and tactical recovery of aircraft and personnel missions.



SEARCH AND RESCUE HH-1N

The primary mission of the Marine Corps Air Station Yuma Search and Rescue is to provide support for military flight operations within a 100 nautical mile radius of the air station. Through the provisions of the National SAR Plan, MCAS Yuma will also respond to community SAR and medivacs if possible. There is a fully qualified crew on 24-hour duty status, seven days a week including holidays.

THE UNITS OF

MAG-13

Marine Aircraft Group 13 is the air station's largest tenant command with four AV-8B Harrier squadrons and one logistics squadron falling under its authority. These units are Marine Attack Squadrons 211, 214, 311 and 513, as well as Marine Aviation Logistics Squadron 13. MAG-13's purpose is to provide combat support to the Marine Air-Ground Task Force in both peacetime training and combat. MAG-13 was established March 1, 1942, in San Diego in response to the Japanese attack on Pearl Harbor, Hawaii, in 1941. MAG-13's units have participated in every major U.S. campaign since World War II and through the Global War on Terrorism. Since Sept. 11, 2001, alone, the unit has amassed more than 15,000 combat flight hours in support of Operation Iraqi Freedom and Operation Enduring Freedom. Recently, approximately 160 VMA-211 and MALS-13 Marines departed for Iwakuni, Japan, in January to attach with the 31st Marine Expeditionary Unit for a seven- to nine-month deployment. VMA-513 is also currently deployed. VMA-214 is scheduled to deploy later this year.



Marine Attack Squadron 211
The Wake Island Avengers



Marine Attack Squadron 214
The Blacksheep



Marine Attack Squadron 311
The Tomcats



Marine Attack Squadron 513
The Flying Nightmares



Marine Aviation Logistics
Squadron 13
The Black Widows



H&HS

Headquarters and Headquarters Squadron consists of approximately 600 Marines and sailors who, along with 1,200 civilians who also work here, are responsible for keeping the air station operating smoothly. The unit consists of a variety of units and sections including air traffic control, airfield operations, administration, logistics, range management and explosive ordnance disposal. Other H&HS sections include communications, combat camera, aircraft rescue and firefighting, military police, postal, legal, public affairs, search and rescue, financial operations and the dining facility. One of the unit's most well-known entities is SAR, as it supports both the station and community and is responsible for saving dozens of people's lives every year.



VMFT-401



Marine Fighter Training Squadron 401, a component of the 4th Marine Aircraft Wing, is the Marine Corps only aggressor squadron. VMFT-401 provide realistic training for Marine and Navy pilots using dissimilar aggressor aircraft and employing current enemy tactics. The Snipers of VMFT-401 are mostly Marine Corps Reserve pilots serving in Active Reserve or weekend drill status. VMFT-401 are also the only squadron in the Marine Corps to use the F-5 Tiger aircraft. The Snipers take part in Marine training exercises both at Yuma and throughout the United States.



MCAS YUMA

MAWTS-1

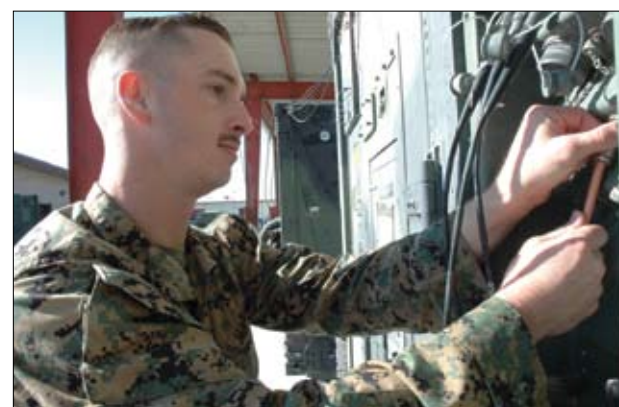
Marine Aviation Weapons and Tactics Squadron 1 provides standardized advanced tactical training and certification of unit instructor qualifications that support Marine aviation training and to provide assistance in the development and employment of aviation weapons and tactics. MAWTS-1 hosts two biannual training exercises, Weapons and Tactics Instructors course and Desert Talon, providing the most realistic training for units visiting MCAS Yuma.



MWSS-371



Marine Wing Support Squadron 371, known as the Sand Sharks, are an aviation ground support unit under Marine Wing Support Group 37, 3rd Marine Air Wing. The Sand Sharks provide support for Yuma's Harrier squadrons in a deployed environment by building airfields, forward re-fueling and re-arming points and any other necessary ground support.



MACS-1

Marine Air Control Squadron 1, also known as the Falconers, provides the station with air traffic control and long-range air surveillance. MACS-1 is part of Marine Air Control Group 38, under 3rd Marine Air Wing. MACS-1 has constantly had Marines deployed in support of Operations Iraqi Freedom and Enduring Freedom.



CLC-16

Combat Logistics Company 16, nicknamed Los Lobos, provides intermediate maintenance and supply support for tactical engineer, motor transport, ordnance and utilities equipment for tenant and augmented commands in the greater Yuma area. CLC-16 is a sub-unit of Combat Logistics Regiment 15, under the 1st Marine Logistics Group. CLC-16 was previously known as Combat Service Support Company-133, but was re-designated as CLC-16 March 20, 2006.



CIVILIAN PERFORMERS



ROB HARRISON

Rob Harrison promises thrilling, acrobatic entertainment in his Czech-built Zlin 50LX named “Tumbling Bear” that will excite children and adults alike. The Zlin 50LX is an unlimited acrobatic monoplane, which dominated European competition for decades.

Harrison retired in 1994 as the program leader for aviation at the U.S. Forest Service Technology and Development Center in San Dimas, Calif. Active in professional society work, he consults for aerospace engineering firms and has his own consulting practice. He is a commercial pilot, mechanic and authorized inspector.



MELISSA ANDRZEJEWSKI

A Edge540 aircraft pilot based out of San Francisco, Melissa Andrzejewski was the youngest member ever on the U.S. Unlimited Aerobatic team.

Through her grandmother, Melissa developed a love for aviation and aerobatics at a young age and began her flying career at 17. Now 24, Melissa is the youngest female on the air show circuit and has won multiple awards at both regional and national competitions.



THE ALABAMA BOYS

Greg Koontz has been performing in airshows since 1974, when he joined Col. Moser’s Flying Circus and learned his trademark maneuvers from the best in the business.

Koontz brings the side-splitting comedy routine where Greg, as Alabama redneck Clem Cleaver, “steals” a Piper Cub and lands on the World’s Smallest Airport—a moving pickup truck.



JON MELBY

Jon Melby knew he wanted to be a pilot at 8 years old when he jumped off the roof of his two-story home into a pile of leaves. After graduating from

high school, he joined the Air Force and flew as an MC-130 Special Operations Loadmaster. At 19, he purchased a plane and hired an instructor to teach him how to fly.

The Pitts S1-11B Biplane

Melby flies has a 340 horsepower motor and is exciting to watch. He flies a high-energy aerobatic routine filled with precision and freestyle maneuvers. Melby makes it a point to meet as many air show fans as possible.

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2009 MCAS Yuma Air Show

Flight Line Map



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Incoming!

Freefall jumpers take the plunge at air show

Cpl. M. Daniel Sanchez
Desert Warrior Staff

A group of five service members, including one Marine from Yuma Proving Ground's Military Freefall School, will open this year's air show.

This will be the first year that freefall school instructors will showcase their skills at the air show.

Representatives from each service and one civilian will make up this year's performance team. Leading the pack will be Master Sgt. Michael Coleman, who will hand a special baton to one distinguished Yuma citizen.

Coleman will present the baton, which will be passed between each instructor in midair, to Kenneth H. Stevenson, an 84-year-old World War II veteran.

Stevenson was one of the first Marines to hit the beaches of Iwo Jima in 1945 as a platoon sergeant with the 27th Marine Regiment, 5th Marine Division, and one of Yuma's last remaining veterans of that era.

It's an honor to be recognized like that, said Stevenson. It shows just how

respectful today's Marines are.

"They are more polite than I ever was," he said. "They are true Semper Parati Marines."

"I've done a few air shows before, but this is going to be pretty fun, especially being able to hand the baton to an Iwo Jima vet," said Coleman, who is jumping at the Yuma air show for the first time.

This is also going to be a good opportunity to show people what the Freefall School is about, said Coleman. Most people know about the Golden Knights, but they don't really know about the free-fall course.

"The big difference is that the free-fall shows (service members) how to insert behind enemy lines," said Coleman. "We also train them how to jump with a full combat load—a 50-pound pack, rifle and oxygen."

The free-fall team is scheduled to jump twice, once in the morning and once in afternoon. The first jump will include the American flag and smoke, while the second jump will only use smoke.

Coleman, a native of Gary, Ind., has been an instructor since 2006 and has



approximately 2,500 jumps under his belt. He is also a certified tandem and bundle master, meaning he can jump with 300 to 500-pound barrels, and is one of seven Marine instructors at the school.

The Military Freefall School, part of the U.S. Army John F. Kennedy Special Warfare Center and School

at Fort Bragg, N.C., is a joint service training school covering all aspects of military free-fall parachuting through the basic, jumpmaster and advanced military free-fall courses. The classes teach students to use high-altitude, low-opening and high-altitude, high-opening parachuting techniques.

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From the heat of the desert to the heat of battle: U.S. Army Yuma Proving Ground

Compiled by

Yuma Proving Ground Public Affairs Office

One of the largest military installations in the western world, 1,300 square miles in size with a total of 2,000 miles restricted airspace, U.S. Army Yuma Proving Ground's mission is to ensure the operational success and dependability of weapon systems and munitions provided to American military forces. The proving ground's test and development facilities are capable of testing nearly everything in the ground combat arsenal, from main battle tanks and artillery pieces to helicopters and parachute systems.

Yuma Proving Ground features the longest over-land artillery range in the nation, the most highly instrumented helicopter armament test range in the Department of Defense, more than 200 miles of improved road courses for testing tracked and wheeled military vehicles, specifically constructed areas for testing technologies used to defeat roadside bombs, hundreds of miles of fiber-optic cable, and the most modern mine and demolitions test facility in the Western hemisphere.

The proving ground's workload directly impacts the defense of freedom around the globe. Tests are performed on a joint service basis for all American military services and a number of friendly foreign nations. The proving ground is an active partner with a wide variety of educational institutions and commercial enterprises to conduct tests outside the scope of the DoD.

The test center is busy on a year-round basis. Tracked and wheeled vehicles traverse one of more than 40 different road courses, over hundreds of miles. Howitzers of many sizes, mortars and direct fire weapons use the largest and busiest overland artillery range in the nation. Specialized facilities representing urban and rural areas overseas feature miles of paved roads, hundreds of buildings, telephone poles, a section of railroad, and much more to test technologies used to defeat the threat of roadside bombs.



Helicopters and unmanned aerial systems fly over the DoD's most highly instrumented aircraft armament range, measuring 18 miles wide and 40 miles long. Parachute testing and training take place at altitudes up to 35,000 feet, with no delays due to crowding or bad weather. Six airfields are available, with extensive UAS testing through restricted airspace over a variety of terrain conditions, from gentle valleys to craggy mountain peaks.

Yuma Proving Ground plays host to several tenants from military organizations around the nation. These include the Military Freefall School and the Special Operations Terminal Attack Controller Course, both part of the John F. Kennedy Special Warfare Center at Fort Bragg, North Carolina. The proving ground is the winter training home for the Golden Knights, the Army's parachute team.

Current environmental programs at Yuma Proving Ground emphasize natural and cultural resource management and compliance with federal and state environmental laws and regulations. The proving ground practices sound land stewardship

and provides a sustainable desert ecosystem for the military mission. The proving ground has no resident populations of endangered species, and little urban encroachment and noise.

YPG hosts well over 25,000 official visitors per year. Nearly 100 military units from around the nation come to the proving ground annually to conduct realistic training. This volume of visitors generates

substantial revenue for local hotels, restaurants, airlines, and businesses.

YPG is proud to be an integral part of Yuma County and the State of Arizona. Its numerous sophisticated and highly instrumented facilities and test mission capabilities

have expanded greatly since its humble beginnings in 1943, as has its relationship with the community and the state. The proving ground's unique capabilities, together with a military and civilian workforce of dedicated professionals, make U.S. Army Yuma Proving Ground truly the "Proving Ground of the Future."

For more information, visit www.yuma.army.mil or e-mail the public affairs office at: publicaffairs@conus.army.mil, or call 928-328-6533.



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